

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 03062734  
PUBLICATION DATE : 18-03-91

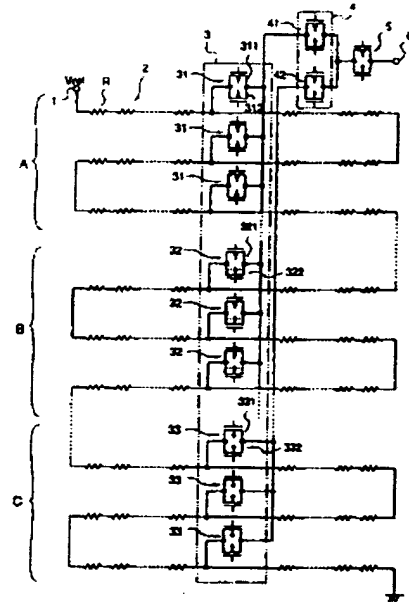
APPLICATION DATE : 31-07-89  
APPLICATION NUMBER : 01198602

APPLICANT : NEC CORP;

INVENTOR : TERAHI HIROHARU;

INT.CL. : H03M 1/80

TITLE : REFERENCE VOLTAGE CIRCUIT



ABSTRACT : PURPOSE: To improve the accuracy of a reference voltage and the operating speed by employing a P enhancement transistor(TR) for a high level transfer gate, a low threshold level N TR for a middle level transfer gate, and an N enhancement TR for a low level transfer gate.

CONSTITUTION: P enhancement TRs 311, 312 offering low ON-resistance and an N TR 322 and low threshold level N enhancement TRs 331, 332 respectively in a high level region A, a middle level region B and a low level region C are employed. Thus, a reference voltage with high accuracy is obtained for all the voltage regions.

COPYRIGHT: (C)1991,JPO&Japio